

Audit More with Less?

Exploring the Dynamics of Risk-Based Audit under Budget Efficiency in Customs and Excise Oversight

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ABSTRACT

This study aims to elaborate how risk-based audit is practiced as an adaptive strategy for preserving oversight quality under capacity pressure in customs and excise oversight. This study adopts an interpretive qualitative design and collects data through semi-structured in-depth interviews with key informants from the Internal Audit Board. The data are analyzed using reflexive thematic analysis to trace meaning patterns around risk prioritization, resource allocation, digital support, and audit adjustment. The findings show that risk-based audit is not merely a technical prioritization tool, but an organizational practice shaped by constrained capacity, professional interpretation, and legitimacy demands. Risk mapping, data analytics, and audit adjustment help auditors preserve oversight substance when resources are constrained. Practically, this study helps government oversight organizations design credible, selective, and accountable audit strategies under budget efficiency pressure.
Keywords: risk-based audit; capacity pressure; bounded rationality; data analytics; public oversight

ABSTRAK

Studi ini bertujuan untuk menguraikan bagaimana audit berbasis risiko dipraktikkan sebagai strategi adaptif untuk menjaga kualitas pengawasan di bawah tekanan kapasitas dalam pengawasan bea cukai. Studi ini mengadopsi desain kualitatif interpretatif dan mengumpulkan data melalui wawancara mendalam semi-terstruktur dengan informan kunci dari Badan Audit Internal. Data dianalisis menggunakan analisis tematik reflektif untuk menelusuri pola makna seputar prioritas risiko, alokasi sumber daya, dukungan digital, dan penyesuaian audit. Temuan menunjukkan bahwa audit berbasis risiko bukan hanya alat prioritas teknis, tetapi praktik organisasi yang dibentuk oleh keterbatasan kapasitas, interpretasi profesional, dan tuntutan legitimasi. Pemetaan risiko, analitik data, dan penyesuaian audit membantu auditor menjaga substansi pengawasan ketika sumber daya terbatas. Secara praktis, studi ini membantu organisasi pengawasan pemerintah merancang strategi audit yang kredibel, selektif, dan akuntabel di bawah tekanan efisiensi anggaran.

Kata kunci: audit berbasis risiko; tekanan kapasitas; rasionalitas terbatas; analitik data; pengawasan publik

INTRODUCTION

Customs and excise risk moves faster than the rhythm of public budgeting. It does not wait for auditors to finish their plans. It enters through shifting trade, compliance gaps, and administrative spaces that never stay still.

In recent years, Indonesia's public sector has faced strong pressure to preserve oversight quality within tightening fiscal space (Aikins et al., 2021; Alzeban, 2021; Soh & Martinov-Bennie, 2015). Efficiency pressure forces internal oversight units to work more selectively, while accountability demands continue to rise. Organizational capacity does not always rise with those demands. In customs and excise oversight, risk complexity prevents audit from being read as a calm map (Azcárraga et al., 2025; Nurnaningsih et al., 2024). Risk arrives as a current that keeps shifting. Auditors are asked to read that current with limited instruments. The oversight organization does not only face the audit object. It also faces its own limits. Audit must preserve oversight quality, yet audit capacity is not always sufficient to pursue all risks. This situation turns audit into a practice of choice. Auditors must determine which audit focus deserves pursuit. That choice is never fully neutral. It carries professional consequences. Risks excluded from priority do not disappear. They merely remain outside the audit spotlight for a while. The research problem therefore lies in how the organization preserves oversight quality under capacity pressure. On paper, "audit more with less" looks neat. In practice, it becomes methodological pressure. Auditors must determine audit focus without sacrificing oversight substance (Almgrashi & Mujalli, 2024; Juwita & Erlina, 2024; Wahyuandari et al., 2025). Failure to read risk may weaken oversight quality, yet that failure does not always appear as visible negligence. Sometimes it appears as a decision that looks rational because capacity is indeed narrow (Cohen et al., 2026; Mensah & Bein, 2023; Tavares et al., 2025).

The conceptual narrative of this study bridges the phenomenon, the research problem, the theoretical lens, and the method. The first concept is risk-based audit, which places risk as the basis of audit priority (Aviva, 2022; Vu et al., 2026; Wang et al., 2025). Through this approach, the organization does not treat all oversight objects with equal intensity. It chooses the focus most meaningful for oversight quality. The second concept is capacity pressure. This concept explains a condition in which oversight demands expand beyond the organization's ability to respond. Capacity pressure prevents audit from surviving through the logic of broad examination. Audit must move through the logic of selection. The third concept is the risk assessment apparatus. This apparatus makes risk more readable to the organization. Yet it does not turn audit decisions into an automatic process. It provides an initial language. Auditors must still interpret. The fourth concept is organizational interpretation. In this process, risk does not immediately become an audit priority. Risk must be understood through the professional context of the organization. Risk must be tested through auditor judgment. Risk must also be placed within broader oversight needs. The fifth concept is audit adjustment strategy. This concept explains how the organization preserves audit substance when oversight capacity narrows (Le et al., 2022; Sudarmono & Tobing, 2022; Tavares et al., 2025). This strategy matters because risk-based audit does not only speak about priority. It speaks about how the

organization makes that priority professionally legitimate. Here, concepts are not academic decoration. Concepts are reading tools. Risk-based audit explains choice. Capacity pressure explains limits. The risk assessment apparatus explains technical language. Organizational interpretation explains meaning. Audit adjustment strategy explains action.

The main theoretical foundation of this study is bounded rationality. This theory is used because audit decisions do not emerge in a world of complete information and unlimited capacity. Auditors rarely work with perfect information. Auditors rarely have unlimited time. Auditors rarely operate within fully ideal organizational capacity. Audit decisions emerge within organizational constraint (Almgrashi & Mujalli, 2024; Amran et al., 2023; Kurniawan et al., 2023). Within bounded rationality, audit decision-making is not the search for an absolutely perfect choice. It is the search for the most feasible choice within certain limits. Those limits are not mere background. They become part of how decisions are formed. This theory helps explain why oversight organizations need a risk assessment apparatus. The apparatus makes risk more readable. Yet readability is not certainty. Risk signals still need to be read. Risk scores still need to be interpreted. Audit priorities still need to be justified. In this study, bounded rationality reads risk-based audit as organizational rationality under constraint. This rationality appears when the organization transforms capacity pressure into an executable audit focus. It also appears when auditors preserve oversight substance even when the form of audit must be adjusted. Yet public-sector audit decisions are not only shaped by internal organizational limits. They are also shaped by legitimacy demands. Therefore, stakeholder theory is used as a supporting theory. This theory helps explain that audit priorities do not only emerge from risk scores. They also emerge from an institutional context that demands public trust (Cohen et al., 2026; Soh & Martinov-Bennie, 2015; Yanuarisa et al., 2025). Through these two lenses, risk-based audit is not read as an administrative machine. It is read as professional practice working within organizational limits and legitimacy pressure.

Prior studies provide an important basis for understanding risk-based oversight practice. Vu et al. (2026) show that risk-based audit can strengthen public-sector audit quality because this approach directs attention to the most meaningful audit focus. Wang et al. (2025) demonstrate that risk-based audit planning can be supported by priority models that make audit decisions more structured. Sanoran and Ruangprapun (2023) show that data analytics can strengthen audit through more systematic risk reading. Dung (2024) confirms that audit quality is influenced by audit support capacity. Amran et al. (2023) show that risk-based audit in the public sector requires the organization's ability to assess risk contextually. Ahrens & Ferry (2020) together with Barbera et al. (2017), explain that fiscal pressure can change public organizations' resource strategies. Shidqi & Firmansyah (2024) show that Government Internal Supervisory Apparatus faces accountability pressure under capacity that is not always ideal. Tavares et al. (2025) show that modern audit is influenced by complexity that requires contextual reading. Yanuarisa et al. (2025) emphasize that public oversight governance cannot be separated from public legitimacy. Sudarmono & Tobing (2022) show that risk-based audit planning

requires audit adjustment strategy to remain relevant to the organization's risk profile. Read together, these studies affirm that risk-based audit cannot be separated from the public-sector oversight ecosystem. That ecosystem includes organizational capacity. It also includes technological support. It moves under efficiency pressure. It is still required to maintain legitimacy. Yet most studies still position risk-based audit as an instrument for improving effectiveness. Their discussions often move around system design, audit capacity, and oversight benefits. This pattern is useful, but it does not sufficiently capture audit life when organizational capacity truly narrows. Literature provides the map. Practice provides the friction.

The research gap emerges from both the similarities and limitations of prior studies. The main similarity lies in their emphasis on risk-based audit as an instrument for improving oversight effectiveness. These studies generally agree that risk-based audit can strengthen oversight quality (Amran et al., 2023; Dung, 2024; Sanoran & Ruangprapun, 2023; Vu et al., 2026; Wang et al., 2025). However, most studies still treat risk-based audit as a relatively stable system design. The literature often starts from the assumption that organizations have sufficient capacity to implement risk-based audit ideally. This assumption becomes problematic when brought into oversight organizations facing capacity pressure. In such conditions, audit priorities are not merely designed. Audit priorities are negotiated. Audit decisions are not merely calculated. Audit decisions are given meaning. The risk assessment apparatus does not work alone. It needs auditors who read. It needs an organization that weighs. It needs a context that sets limits. Few studies have read audit decisions when the risk map is wider than oversight capacity. Few studies have also examined how audit decision apparatuses work under efficiency pressure. This is where this study differs from prior research. This study does not only ask whether risk-based audit is effective. It asks how that effectiveness is preserved in practice. It also does not see audit priority merely as the output of a system. It sees audit priority as the result of professional meaning-making. The empirical context is also more specific. This study examines customs and excise oversight at the Internal Audit Board as a space with high oversight sensitivity. Thus, the research gap lies in the need to read risk-based audit as an organizational practice. The matrix gives form. The organization gives meaning. Auditors give judgment. Between the three, audit decisions are born.

Based on this gap, the study offers theoretical, methodological, and empirical novelty. Theoretically, this study extends the reading of risk-based audit by positioning it as organizational rationality under constraint. This novelty emerges because risk-based audit is read as professional meaning-making within limited organizational capacity. Through bounded rationality, constraint is understood as a condition that shapes audit decisions. Constraint is no longer treated as a mere administrative disturbance. It becomes a condition that shapes how auditors make choices. Through stakeholder theory, this study shows that audit priority also emerges from legitimacy pressure. Thus, audit priority does not depend only on the risk assessment apparatus. It also depends on the institutional context that gives weight to certain issues. Methodologically, this study uses an interpretive qualitative approach. This approach is used to read informants' narratives as traces of audit

decision formation (Braun & Clarke, 2024; Naeem et al., 2023; Tahir, 2024). Interview excerpts are not treated as empirical decoration. They are treated as entry points for reading the context of audit decisions. Empirically, this study examines risk-based audit practice in customs and excise oversight. This context matters because it carries high oversight sensitivity. Empirical novelty also lies in the attention given to oversight transformation. That transformation appears through the use of risk assessment apparatuses. It also appears through the strengthening of support systems. It becomes clearer when the organization changes how it preserves audit quality under capacity pressure. Therefore, the novelty of this study does not stop as a formal claim. Novelty works as a way of reading organizational experience in conducting audit under constraint. Audit does not appear as a sterile procedure. Audit appears as organizational work that must remain legitimate when resources narrow.

This study uses an interpretive paradigm because risk-based audit practice is understood as a process of meaning-making within the professional context of auditors (Chatzichristos, 2025; Lim, 2025; Sudarmono & Tobing, 2022). In this paradigm, risk is not treated as a neutral object waiting to be placed into a matrix. Risk is given meaning through organizational interpretation. The main research question is: *how is risk-based audit carried out in customs and excise oversight when the organization faces capacity pressure?* This question is directed at elaborating the process of risk-based audit adjustment at the Internal Audit Board of the Ministry of Finance. The study aims to elaborate risk-based audit practice as an adaptive strategy for preserving oversight quality. The research data are collected through semi-structured in-depth interviews with key informants from the Internal Audit Board of the Ministry of Finance. The data are analyzed using reflexive thematic analysis to read patterns of meaning related to audit adjustment strategy (Braun & Clarke, 2024; Naeem et al., 2023). Practically, this study is expected to help the Internal Audit Board design credible audit strategies amid budget efficiency pressure. This contribution is also relevant for the Directorate General of Customs and Excise. The same contribution may be used by the Government Internal Auditor facing similar capacity pressure. Thus, this study does not merely explain audit procedures. It reads audit work as an organizational practice that must remain accountable under organizational constraint. The answer is not pursued through numerical causal relationships, but through professional meanings drawn from the experiences of oversight actors. From there, risk-based audit can be understood as a practice that lives within organizational limits. Risk keeps moving. Capacity remains limited. Auditors still have to choose. That choice is the center of this study's reading.

METHOD

This study employed an interpretive-constructivist qualitative design to examine how risk-based audit is carried out in customs and excise oversight when the organization faces capacity pressure (Qadri, 2019b, 2019a, 2020). This design is aligned with the research question because the study does not seek to test causal relationships among variables, but to understand how oversight actors interpret risk, construct audit priorities, and adjust audit strategies within organizational

constraints (Qadri, 2024; Qadri & Firmansyah, 2020; Qadri & Jauhari, 2020). In this perspective, risk is not treated as a neutral object that automatically becomes an audit score. Rather, risk becomes meaningful through the interaction between auditors, organizational systems, policy pressures, and the institutional context of public oversight (Chatzichristos, 2025; Lim, 2025; Sudarmono & Tobing, 2022). The empirical setting of this study was the Internal Audit Board of the Ministry of Finance, particularly in relation to its oversight of customs and excise activities. This terminology is used consistently throughout the study to refer to the organizational context in which the informants work and in which risk-based audit is practiced. The Internal Audit Board is a relevant setting because customs and excise oversight involves dynamic risks, public revenue sensitivity, compliance issues, and institutional accountability demands. Under budget efficiency pressure, this setting provides a meaningful case for understanding how audit priorities are selected and how oversight quality is preserved when audit capacity is limited. Data were collected through semi-structured in-depth interviews with two key informants from the Internal Audit Board. The first informant was a junior auditor who was directly involved in administrative and oversight planning processes, while the second informant was an intermediate auditor with substantive experience in customs and excise oversight. The informants were selected purposively because they had direct knowledge of audit planning, risk mapping, resource allocation, and audit implementation. In qualitative research, the adequacy of informants is not determined statistically, but by the depth, relevance, and richness of the information they provide. For this study, the two informants were considered sufficient because both occupied positions directly connected to the phenomenon under investigation and were able to explain the operational, technical, and interpretive dimensions of risk-based audit practice (Tahir, 2024). The interview questions were organized around the main research question and focused on four domains: how risks are mapped and prioritized, how limited audit resources are allocated, how data analytics and the Assurance Information System support risk assessment, and how audit procedures are adjusted to preserve oversight accountability. Semi-structured interviews were used to maintain a balance between analytical focus and openness to the informants' lived professional experience. This format allowed the researchers to ask comparable core questions while still giving space for follow-up questions, contextual explanations, and reflective accounts of audit decision-making. All interviews were conducted with the consent of the informants. The interviews were recorded and transcribed into text to support systematic analysis. The initial transcripts were then converted into clean verbatim form by removing repetitions, fillers, and irrelevant conversational fragments without changing the substantive meaning of the informants' statements. After transcription, the researchers repeatedly read the transcripts to become familiar with the flow of the interviews, recurring terms, institutional expressions, and patterns of meaning. This familiarization stage was important because the study aimed to interpret the meaning of audit practice rather than merely summarize interview statements. Data analysis was conducted using reflexive thematic analysis following the logic of Braun and Clarke and later qualitative thematic analysis literature (Braun & Clarke,

2024; Naeem et al., 2023). The analysis was carried out through seven operational stages. First, the researchers familiarized themselves with the data by repeatedly reading the transcripts and noting initial impressions. Second, initial codes were developed from data segments related to risk reading, audit prioritization, capacity pressure, technological support, and procedural adjustment. Third, related codes were grouped into broader categories. Fourth, these categories were developed into preliminary themes. Fifth, the themes were reviewed by comparing them with the interview data and the research question. Sixth, the themes were named and refined to clarify their analytical contribution. Seventh, the findings were written interpretively by connecting empirical patterns with the theoretical lenses of bounded rationality and stakeholder theory. The final themes were structured to follow the analytical logic promised in the introduction. These themes are: risk mapping as organizational reading, capacity pressure and audit resource allocation, data analytics and the Assurance Information System as risk-sensing infrastructure, and procedural adaptation as audit accountability. This structure was used to ensure that the method, findings, and theoretical discussion remained aligned. The analytical process therefore did not stop at coding; it moved from interview statements to codes, from codes to categories, from categories to themes, and from themes to theoretical interpretation. Several strategies were used to strengthen the credibility of the analysis. First, the researchers conducted limited member checking by ensuring that the interpretation of key statements did not contradict the intended meaning conveyed by the informants. Second, the researchers maintained an analytical trail consisting of transcripts, initial codes, category groupings, theme development notes, and interpretive memos. Third, the researchers compared the answers of the two informants to identify points of convergence, tension, and complementarity. Fourth, reflexivity was maintained throughout the analysis by recognizing that the researchers' familiarity with public-sector oversight could influence interpretation. To reduce this risk, the interpretation was continuously returned to the transcript and supported by interview excerpts. These procedures were used to ensure that the study did not rely merely on two voices, but on a careful and transparent process of qualitative interpretation.

RESULTS AND DISCUSSION

Risk Mapping as Organizational Reading

The interviews show that risk-based audit in the Internal Audit Board does not begin as a spontaneous response to problems that have already surfaced. It begins through early planning in which auditors attempt to read the auditee's business processes, risk exposure, and oversight context. One informant explained that the process starts from "T minus one" because the oversight unit must first understand the client's business process and risk profile before determining the audit focus. This statement indicates that risk mapping is embedded in a planned cycle rather than in an incidental reaction to emerging issues. Both informants emphasized that the reading of risk is strongly connected to the reading of business processes. One informant stated that the Internal Audit Board usually starts from "level three because it is more operational." This choice shows that the organization

tries to locate risk at a level close enough to real operational activity, but still manageable for audit planning. Risk mapping is therefore neither too abstract nor too fragmented. It works as an organizational effort to make complex customs and excise activities readable for audit decision-making.

Risk assessment is not built from a single source of information. The informants explained that business processes, prior audit findings, leadership direction, public attention, and indications of fraud are all considered in determining audit priorities. One informant stated that “leadership direction is certainly considered.” This statement shows that risk is not understood merely as a technical score. Risk is also shaped by institutional sensitivity and the organization’s need to respond to issues that may affect public trust.

The interviews also indicate that risk mapping involves calibration and dialogue. Initial risk signals, including those generated through the risk assessment apparatus, are not accepted mechanically. One informant noted that “calibration is still needed” before an oversight theme is finalized. Another informant explained that the team also discusses the proposed theme with the process owner to ensure that the selected focus is relevant to actual operational conditions. These statements show that risk does not immediately become an audit priority after being scored. It must first pass through professional judgment, organizational discussion, and contextual verification.

This organizational interpretation becomes clearer in the informants’ explanation of how AIS recommendations are treated after scoring. One informant emphasized that the score is not a final decision, but an initial analytical output that must still be validated and discussed with relevant organizational actors:

“The score is still our initial analysis. It must still be communicated. Even after AIS provides its recommendation, we still validate the result, identify business processes that may not have been captured, and consolidate the selected processes. The result is then brought to a three-line discussion forum involving the process owners, so that we can obtain their perspective before agreeing on the audit theme.”

The excerpt shows that risk does not immediately become an audit priority once it receives a numerical score. The score remains provisional because it must be interpreted against business process realities, organizational concerns, and the perspectives of process owners. In this sense, risk mapping is not merely an administrative calculation, but a process of organizational interpretation in which data, professional judgment, and institutional agreement are brought together before the audit focus is formally determined. This finding suggests that risk mapping in the Internal Audit Board is best understood as organizational reading. The organization uses indicators, systems, experience, and dialogue to simplify complex risk conditions into audit priorities. The selected audit focus is therefore not merely the output of a matrix, but the result of professional interpretation within an institutional setting.

Capacity Pressure and Audit Resource Allocation

The second finding concerns the way the Internal Audit Board allocates audit resources under capacity pressure. The informants consistently explained that budget efficiency and limited resources affect the form of audit implementation

rather than eliminating the substantive oversight theme. One informant stated that “what we usually reduce is the number of offices, days, or personnel; the theme remains.” This statement is important because it shows that efficiency is not interpreted as a reduction of audit responsibility. Instead, capacity pressure forces the organization to make audit execution more selective. The reduction of audit scope is also not carried out randomly. When the number of audited offices must be reduced, the Internal Audit Board attempts to retain objects that are representative or that reflect higher risk exposure. One informant explained that when offices are reduced, the team still chooses those “representing the largest population.” This approach indicates that the organization tries to preserve the informational value of audit work even when audit coverage becomes narrower. In other words, selectivity is used to protect audit relevance, not to justify weaker oversight.

Capacity pressure also affects the allocation of audit time and personnel. The informants described that audit planning must consider the available number of auditors, the number of audit days, and the cost needed to conduct fieldwork. However, these adjustments are guided by risk considerations. The organization does not simply reduce activities; it rearranges them so that limited resources are directed toward areas where audit work is expected to produce the most meaningful oversight contribution. This finding shows that resource allocation under capacity pressure is a strategic decision. The organization narrows the form of audit implementation while trying to preserve the substance of oversight. Therefore, budget efficiency does not automatically weaken audit quality. It becomes a condition that requires the organization to justify why certain objects, offices, and audit procedures deserve priority.

Data Analytics and AIS as Risk-Sensing Infrastructure

The third finding highlights the role of data analytics and the Assurance Information System as risk-sensing infrastructure. Both informants described data analytics as increasingly central in helping auditors identify areas that require deeper examination. One informant explained that auditors now come to the field mainly “to verify anomalies from data analytics.” This statement indicates a shift in audit work. Fieldwork is no longer primarily a space for broad initial exploration, but rather a stage for testing and deepening risk signals identified before the audit begins. Data analytics also changes the sequence of audit work. Several initial identification processes can be conducted before the audit team enters the field. As a result, fieldwork becomes more focused because auditors already bring specific indications or hypotheses to be verified. This does not mean that data analytics determines the audit conclusion. Rather, it helps auditors narrow the scope of attention and use limited field time more effectively.

The informants also explained that data analytics assists the organization in estimating audit resource needs. From analytical results, the Internal Audit Board can begin to estimate the required cost, personnel, and audit days. One informant emphasized that planning for cost, people, and time “all starts from there,” referring to the results of data analysis. This shows that data analytics functions not only as a

tool for identifying risk, but also as a basis for designing audit intervention under resource constraints. The development of the Assurance Information System further strengthens this infrastructure. The informants explained that the organization is developing AIS to support risk mapping and prioritization more systematically. However, they did not describe AIS as a finished or fully deterministic system. One informant emphasized that the main challenge is to ensure that the scoring logic and the data entered into the system are relevant for audit needs. This means that AIS remains a developing apparatus that must be continuously refined and calibrated.

The findings therefore show that technology supports, but does not replace, professional judgment. Data analytics and AIS help the organization sense risk, structure information, and focus attention, but audit priority still requires interpretation by auditors. This point is central to the interpretive position of the study: technology does not turn audit into an administrative machine. It expands the organization's ability to read risk while still requiring human judgment to give meaning to the signals produced.

Procedural Adaptation as Audit Accountability

The fourth finding concerns the way audit procedures are adapted to preserve accountability. The informants explained that when resources are constrained, the Internal Audit Board adjusts the number of offices, audit days, personnel composition, and fieldwork arrangements. However, these adjustments are made while maintaining the substantive oversight theme. Procedural adaptation is therefore not simply a matter of doing less. It is a way of ensuring that limited audit capacity remains directed toward the most accountable audit focus. The interview data show that audit adaptation is linked to representativeness, risk exposure, and the credibility of audit evidence. When fewer objects can be audited, the selected objects must still be able to represent the relevant population or risk condition. When fewer audit days are available, preliminary analysis must become stronger so that fieldwork can focus on confirming meaningful anomalies. This relationship between preparation and fieldwork shows that procedural adaptation is designed to preserve the credibility of audit results.

Another important aspect of procedural adaptation is auditor competence. The informants described a complementary relationship between senior auditors and younger auditors. Senior auditors were seen as stronger in understanding the broader business process and strategic oversight perspective, while younger auditors were considered more familiar with information technology and data analytics. One informant stated that senior auditors understand the "helicopter view," even though younger auditors may be stronger in technical data skills. This finding suggests that audit accountability depends not only on procedure, but also on the organization's ability to combine strategic understanding and analytical capability. Overall, the findings show four empirical patterns. First, risk is mapped through business process reading, risk indicators, organizational experience, and professional calibration. Second, capacity pressure leads the organization to allocate audit resources more selectively while preserving the substance of oversight. Third,

data analytics and AIS help the organization sense risk and focus audit decisions, but still require auditor interpretation. Fourth, audit procedures are adapted to maintain credibility and accountability under constrained capacity. These findings provide the empirical basis for the theoretical discussion that follows.

Risk Mapping and Bounded Rationality

The finding on risk mapping can be read through bounded rationality. In customs and excise oversight, auditors face a risk environment that is too broad and dynamic to be audited completely. The organization therefore needs ways to simplify complexity. Business process reading, risk indicators, scoring, dialogue with process owners, and organizational calibration are mechanisms through which the Internal Audit Board transforms complex risk conditions into manageable audit priorities. This supports prior studies that describe risk-based audit as an approach for focusing audit attention on the most significant areas (Amran et al., 2023; Vu et al., 2026; Wang et al., 2025). However, this study extends that literature by showing that risk prioritization is not only a technical process. In practice, the risk score does not end the decision-making process. It opens the space for interpretation. Auditors do not search for a perfectly complete decision because such a decision is impossible under limited information and capacity. Instead, they search for a feasible and defensible decision. From a bounded rationality perspective, risk-based audit is therefore an organizational method for making reasonable choices within imperfect conditions.

Capacity Pressure as Satisficing Audit Decision

The second discussion concerns the relationship between capacity pressure and audit resource allocation. The findings show that budget efficiency affects personnel, audit days, scope, and object selection. This confirms public-sector studies showing that fiscal pressure changes how public organizations use their resources (Ahrens & Ferry, 2020; Barbera et al., 2017; Shidqi & Firmansyah, 2024). Yet this study adds that capacity pressure is not only an administrative background. It actively shapes audit logic. Under bounded rationality, the decisions made by the Internal Audit Board can be understood as satisficing decisions. The organization does not choose the most ideal audit coverage in an absolute sense. It chooses a coverage that is feasible, representative, and justifiable within the available capacity. The reduction of offices, days, or personnel is therefore not an abandonment of responsibility, but a decision to preserve the most meaningful audit focus under constraint. This finding shows that budget efficiency becomes part of how audit priorities are constructed and defended.

Data Analytics, AIS, and the Management of Organizational Limits

The third discussion concerns data analytics and AIS as instruments for managing bounded rationality. When auditors cannot process all information manually and cannot audit every object equally, technological support becomes a way to expand the organization's risk-reading capacity. This is consistent with studies that show the importance of data analytics in strengthening audit planning,

risk identification, and audit quality (Dung, 2024; Sanoran & Ruangprapun, 2023; Tavares et al., 2025). Nevertheless, the findings of this study show that technology does not replace auditors. Data analytics and AIS provide signals, patterns, and prioritization support, but these outputs still require calibration. This means that the risk assessment apparatus works within, not outside, professional judgment. The technology helps the organization reduce information complexity, but auditors still determine what the signals mean and how they should be translated into audit work. This finding is important because it keeps the argument consistent with the interpretive view of audit as professional meaning-making rather than mechanical administration.

Stakeholder Theory and Audit Accountability

The fourth discussion uses stakeholder theory to interpret audit accountability. The findings show that audit priorities are shaped not only by technical risk indicators, but also by leadership direction, public attention, prior findings, fraud indications, and institutional sensitivity. In customs and excise oversight, these factors matter because the audit area is closely connected to state revenue, compliance, public trust, and strategic national risk. This supports studies arguing that public-sector audit is shaped by legitimacy demands and stakeholder expectations (Cohen et al., 2026; Soh & Martinov-Bennie, 2015; Yanuarisa et al., 2025). Through stakeholder theory, audit priority can be understood as a publicly accountable choice. The organization must be able to explain why certain risks are prioritized and why certain audit objects are selected. Therefore, risk-based audit is not only about technical efficiency. It is also about maintaining institutional credibility. In this sense, procedural adaptation becomes part of audit accountability because every adjustment in scope, time, and personnel must still preserve the legitimacy of oversight results.

Synthesis

The findings and discussion can be synthesized into a single argument: risk-based audit under budget efficiency is an adaptive oversight strategy that combines risk prioritization, data-enabled risk sensing, professional judgment, and accountable procedural adjustment. The Internal Audit Board does not merely reduce audit activity in response to limited resources. It reorganizes audit work so that limited capacity can still be directed toward the most meaningful oversight areas. This study contributes theoretically by showing how bounded rationality and stakeholder theory operate in concrete public-sector audit decisions. Bounded rationality explains why the organization must simplify complexity and make feasible choices under limited capacity. Stakeholder theory explains why those choices must remain legitimate and accountable in the eyes of public and institutional stakeholders. Empirically, the study contributes by showing how the practice of “audit more with less” is enacted in customs and excise oversight through risk mapping, selective resource allocation, data analytics, AIS development, and procedural adaptation. Practically, the findings suggest that government internal auditors facing similar capacity pressure need to strengthen

data-driven prioritization, maintain professional calibration, and ensure that audit adjustments remain defensible as part of public accountability.

CONCLUSION AND RECOMMENDATIONS

This study shows that risk-based audit practice in the Internal Audit Board under budget efficiency is not carried out by reducing attention to risk, but by reorganizing the oversight strategy so that it remains effective under limited organizational capacity. Risk mapping and assessment are conducted selectively through business process reading, multiple risk indicators, organizational calibration, and increasingly strong support from data analytics. In implementation, limitations in personnel, audit days, and audit scope are addressed through the selection of more representative objects, more focused fieldwork, and the use of data analysis to identify anomalies before they are verified in the field. The study also shows that the development of the Assurance Information System and the management of auditor competence are important parts of risk-based oversight transformation. Thus, this study confirms that risk-based audit in the public sector can still be implemented adaptively, credibly, and accountably despite budget efficiency pressure and resource constraints. The novelty of this study lies in its ability to show that risk-based audit under resource constraints is not only a technical method for determining audit priorities, but also an organizational strategy for managing limited information, limited capacity, and accountability demands at the same time. This study is important because most discussions of risk-based audit still tend to position it as a normative solution, while this study demonstrates how the approach is actually practiced in customs and excise oversight, a context characterized by high and dynamic risk. Practically, the findings may serve as input for the Internal Audit Board of the Ministry of Finance, the Directorate General of Customs and Excise, and other Government Internal Supervisory Apparatus in strengthening oversight through risk prioritization, data analytics, and more integrated support systems. The study also indicates that strengthening auditor competence, particularly the ability to combine strategic perspective and analytical capability, is essential for maintaining oversight quality under limited resources. Therefore, the practical implication of this study is the need for oversight organizations to develop audit strategies that are more data-driven, more selective, and more adaptive to changes in the oversight environment. This study has limitations because it focuses on a single oversight organization, namely the Internal Audit Board, and relies on two key informants. Therefore, the findings are intended to provide depth of understanding rather than statistical generalization to all public-sector oversight organizations. In addition, this study focuses on the perspective of internal oversight actors and has not included the perspective of audited units or other actors within the oversight ecosystem. Future research may expand the scope by involving more informants from various positions, comparing several oversight units, or combining qualitative inquiry with document analysis and supporting quantitative data to obtain a more comprehensive picture. Further studies may also examine the effectiveness of data analytics, the development of audit support systems, and the dynamics of auditor

competence in risk-based oversight transformation. Such research is expected to enrich the understanding of how public-sector oversight organizations preserve audit quality under increasingly complex capacity constraints.

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